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(71) Applicant (for FR only): **SERVICES PETROLIERS SCHLUMBERGER** [FR/FR]; 42, rue Saint-Dominique, F-75007 Paris (FR).

(71) Applicant (for AT, AU, AZ, CO, DE, DK, ES, HR, ID, IE, IT, KP, KR, KZ, MX, NO, NZ, PH, PL, RO, RU, SK, TM, UA, ZA only): **SCHLUMBERGER TECHNOLOGY B.V.** [NL/NL]; Parkstraat 83-89, NL-2514 JG The Hague (NL).

(71) Applicant (for all designated States except AE, AT, AU, AZ, BR, CA, CG, CM, CN, CO, CZ, DE, DK, DZ, EC, EG, ES, FR, GA, GN, GQ, GW, HR, ID, IE, IN, IT, KP, KR, KZ, LT, MA, MX, NA, NE, NO, NZ, OM, PG, PH, PL, RO, RU, SD, SK, SY, TD, TM, TN, TR, TT, UA, US, VN, ZA): **SCHLUMBERGER HOLDING LIMITED**; PO Box 71, Craigmuir Chambers, Road Town, Tortola (VG).

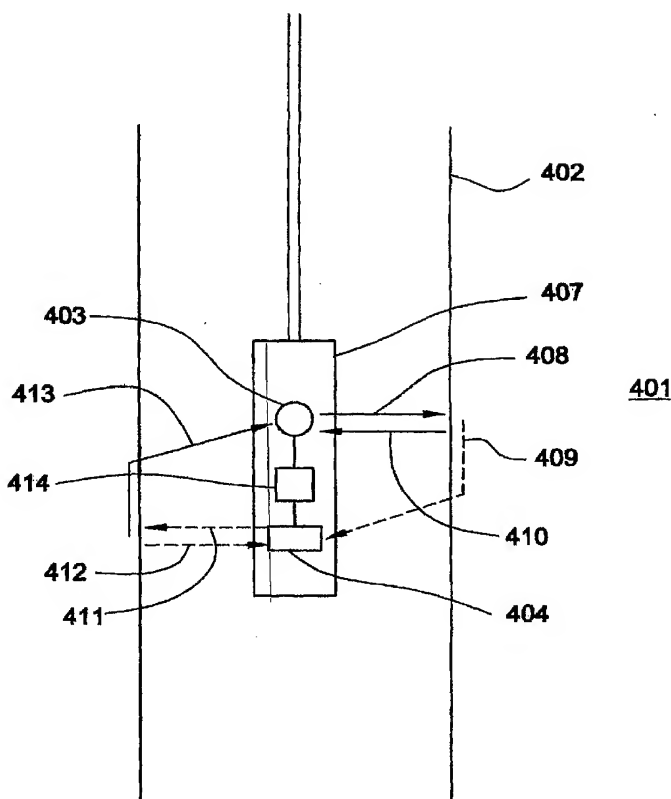
(71) Applicant (for CA only): **SCHLUMBERGER CANADA LIMITED** [CA/CA]; 525 - 3rd Avenue S.W., Calgary, Alberta T2P 0G4 (CA).

(71) Applicant (for CN only): **SCHLUMBERGER OVERSEAS S.A.** [PA/PA]; 8 Calle Aquilino de la Guardia, Panama City (PA).

(71) Applicant (for AE, OM, SD, SY, TR only): **SCHLUMBERGER OILFIELD ASSISTANCE LIMITED**; Craigmuir Chambers, Road Town- Tortola (VG).

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(54) Title: CHARACTERIZING PROPERTIES OF A GEOLOGICAL FORMATION BY COUPLED ACOUSTIC AND ELECTROMAGNETIC MEASUREMENTS



(57) Abstract: A method for characterizing a formation (401). The method comprises exciting the formation with an acoustic wave propagating into the formation. A seismo-electromagnetic signal (409) produced by the acoustic wave (408) within the formation (401) is measured. The method further comprises exciting the formation (401) with an electromagnetic exciting field (411). An electromagneto-seismic signal (413) produced by the electromagnetic exciting field (411) within the formation is measured. The measured seismo-electromagnetic signal (409) and the measured electromagneto-seismic signal (413) are analyzed to evaluate characterizing parameters of the formation (401).

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- (71) **Applicant** (*for BR only*): **SCHLUMBERGER SURENCO S.A.** [PA/PA]; 8 Calle Aquilino de la Guardia, Panama City (PA).
- (71) **Applicant** (*for TT only*): **SCHLUMBERGER SERVICES LIMITED**; P.O. Box 438, Tortola (VG).
- (71) **Applicant** (*for EG only*): **SCHLUMBERGER SEACO INC.** [PA/PA]; 8 Calle Aquilino de la Guardia, Panama City (PA).
- (71) **Applicant** (*for CG, CM, CZ, DZ, EC, GA, GN, GQ, GW, IN, LT, MA, NA, NE, PG, TD, TN, VN only*): **PRAD RESEARCH AND DEVELOPMENT NV** [NL/NL]; De Ruyterkade 62, Willemstad-Curacao (AN).
- (72) **Inventors; and**
- (75) **Inventors/Applicants** (*for US only*): **CHARARA, Marwan** [FR/FR]; c/o Etudes et Production Schlumberger, 1 rue Henri Becquerel, F-92142 Clamart Cedex (FR). **LIGNEUL, Patrice** [FR/FR]; c/o Etudes et Productions Schlumberger, 1, rue Henri Becquerel, F-92142 Clamart Cedex (FR).
- (74) **Agent**: **ETUDES & PRODUCTIONS SCHLUMBERGER**; 1, rue Henri Becquerel, BP 202, F-92142 Clamart Cedex (FR).
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